It is with this development of the white matter that Prof. Marshall associates the breadth of the gyri.

The latter part of the paper is taken up with the discussion of the significence of asymmetry in the human brain.

Prof. Marshall attempts to associate this to a certain extent with the "one-handedness" in man; and, of course, in this connection has to discuss the problem of localization of function in the cerebral cortex.

It is in this portion, especially, that the paper bears evidence of having been written a number of years ago.

The plates which accompany the paper, we are sorry to say, leave much to be desired.

Quain's Anatomy. *Tenth Edition.*

By E. A. Schäfer and G. D. Thane. Vol. i., Part ii., General Anatomy or Histology; Vol. iii., Part i., The Spinal Cord and Brain.

In the above-mentioned portions of the tenth edition of Quain's Elements of "Anatomy," we have a discussion, first, of the nerve elements; and, second, of the central nervous system.

The portion on the nerve elements contains some of the newer views on the structure of the nerve fibre, and somewhat less that is new concerning the nerve cell.

The structure of the medullary sheath receives proper attention, and the axis cylinder is described as showing a fibrillar structure without discussing the cause of the appearance.

The relation of the nerve process of the cell body is described in the text, but in the introductory pages cells and fibres are spoken of as two different elements.

In the part devoted to the central nervous system, one is struck by the number of new and very excellent illustrations; and here the cerebellum and cerebrum receive more attention than has hitherto been given to them in this work.

The fibre tracts in the spinal cord are carefully illustrated, and a number of other new illustrations of sections of the nervous system are introduced after preparations made by Prof. Schäfer.

Although many of the old cuts have been retained, it is certainly a distinct advantage that illustrations of specimens prepared by newer methods, and reproduced in different ways, should be found side by side with them, since the very method of reproduction, giving as it does an impression of texture, more or less different, from that of the thing itself, is thus balanced and modified.

The ample and systematic references to the literature, and the concise and full account of the best work, will make this part more useful than ever to the general student.

A Physiological, Histological, and Clinical Study of the Degeneration and Regeneration in Peripheral Nerve Fibres after Severance of their connections with the Nerve Centres.

By W. B. Howell and G. C. Huber. (Reprinted from the Journal of Physiology, Vol. xiii., No. 5, 1892; Vol. xiv., No. 1, 1893.)

The authors take up their subject under three subdivisions: a review of previous experimental work; an account of their own experimental work, and a critical resumé of surgical cases of primary and secondary suture.

Each subdivision is accompanied by very full reference to the literature.

It would seem as though a careful study of the manner in which the nerve breaks down in the process of degeneration, and builds itself up in that of regeneration, would add greatly to our understanding of the axis cylinder, the medullary sheath, and the nuclei of the sheath.

The observations of these authors were made upon dogs.

It appears that a nerve, separated from its nutritive centre, degenerates completely, almost simultaneously through its entire length, the medullary sheath being first affected, then the axis cylinder, the active agents in this process being the nuclei of the medullary sheath, which become greatly increased in number.

Of necessity, the method of investigation gives a series of separate, slightly different pictures; and the conclusions drawn depend upon the interpretations given to these pictures when considered in panoramic view.

As a natural result a great deal must be left to interpretation; and, after the very careful and cautious work by the authors, such questions as the origin of the medullary substance, and of the axis cylinder in the regenerating fibre, can receive no positive answer; nor is it plain from their work that the processes of regeneration are a repetition of the processes of development.

Concerning the response of the regenerating nerves